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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,495	06/27/2000	KAZUHIKO OHGA	Q59644	8756

7590 03/26/2003

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EXAMINER
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REYES, HECTOR M

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 03/26/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/582,495

Applicant(s)

OHGA ET AL.

Examiner

Hector M Reyes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 4, 6-13 and 24 -34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,7,8,10-13 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 6,9,24-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### **Paper Entry**

Examiner acknowledges Applicant's:

- Amendment D, filed on September 3, 2002 as Paper no. 12.
- Request for Extension of Time filed on December 3, 2002 as Paper no. 14
- Appeal Brief filed on December 3, 2002 as paper no. December 3, 2002 as paper no. 15
- Letter Requesting Entry of Amendment and New Office Action.

### **Status of the Application**

Final Action filed on June 3, 2002 as paper no. 11 had been withdrawn as indicated in Interview Summary. Amendment D has been entered. A new Office Action is hereby presented to Applicant.

### **Status of The Claims**

Claims 21 through 23 had been canceled as indicated in Paper no. 4. Claims 1, 2, 5, 14, 19 and 20 had been canceled as indicated in Paper no. 8. Claims 3 and 15 through 18 had been canceled as indicated on Paper no. 10. Currently, claims 4, 6-13 and 24-34 are under Examination.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 8, 10, 11, 30, 31 and 33 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for carrying out hydrogenation processes using as hydrogenation catalysts: ruthenium, nickel, palladium and rhodium, does not reasonably provide enablement for using other hydrogenation catalysts in the claimed process. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. See *In re Wands*, 8 USPQ d 1400.

#### **The breadth of the Claims:**

In claim 10 and 30, the claimed processes required as an essential feature a "hydrogenation catalyst", therefore any possible catalyst used in the hydrogenation processes are embraced in the said definition.

In claim 8, 31 and 33, the essential catalyst is defined as one that comprises at least one of the following metallic elements: groups VIII, IX and X of the periodic table, (***presumable compounds in the VIIIB group***).

In claim 11 the required catalyst is defined as consisting of compounds of groups VIII, IX and X of the periodic table, (***presumable compounds in the VIIIB group***). Proper identification is requested.

The number of possible catalysts, taking in consideration that in some instances any compound containing at least one of the said compounds is the only requirement is quite large. Moreover, the specific preparation procedures for most of the possible catalyst are not disclosed.

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**Prior art Status**

In the catalyst art it is well established that catalyst have unique, specific and non-predictable behavior. Therefore, similar catalysts are not considered to behave similarly and a procedure that it is carried out with a given catalyst does not necessarily can be performed with a similar catalyst. In cases wherein a catalyst is required or is essential, the proper characterization of the catalyst is required. See Ex parte Sixto, 9 USPQ 2d 2081 (1988).

Therefore, each one of the claimed processes required as essential a catalyst. However, in order to practice each process with catalysts other that the above mentioned, the person skill in the art would be required to:

- Figure out how to prepared the said catalysts
- Find out the specific conditions required to perform the said methods in order to prepare the compounds described in the claims.

Undue experimentation is therefore necessary in order to carry out each one of the said processes with metals different from ruthenium, nickel, palladium and rhodium.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 7, 8, 10, 11, 30, 31, 32 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claims 4, 7, 10, 30 and 31 the adjective **general** is use to describe a formula which is limited to specific number of compounds. Therefore the phrase **general formula** is considered indefinite because the said phrase does not indeed is general. A general formula would embrace indefinite possibilities of compounds and it would be impossible to determine the specific starting material that would be required to carry out the said process or those intended to be obtained as product. The Examiner suggests the elimination of such adjective from the said claim.

In claims 10 and 30, the term **hydrogenating catalyst** is indefinite because multiple alternatives embrace in the said definition. Which are the required catalysts embraced by the phrase? Catalysts are considered specific and unpredictable in the art.

Therefore, similar catalysts may pretty well behave in a different manner even in the same process conditions. Applicant is suggested to identify the required catalyst. See **Ex Parte Sixto**, 9 USPQ2d, 2081 (1988).

In claims 10 and 30, the definitions of variables R1 to R5 are said to denote a list of different alternatives that are indeed mutually exclusive. For instance, R1 cannot be all the possible alkyl groups having 1-10 carbons simultaneously, or an alkenyl group having 2 to 10 carbons etc. Such definition lacks definition and clarity. Examiner suggests the use of the proper alternative language, for Example, **"wherein R1...R5 are selected from the group consisting of arbitrary alkyl group containing 1 to 10 carbons atoms, an arbitrary alkenyl..."**

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In claim 8, the term ***hydrogenating catalyst comprises at least one element selected from the group consisting of Group VIII elements, Group IX elements and Group X elements*** is indefinite because there are multiple alternatives embraced in the said definition. Which are the catalysts embraced by the phrase and required in the process? Groups IX and X are not found in the periodic table, see copy of recent periodic table included. Examiner has presumed that such elements are ***elements in the VIIIB group*** for examination purposes. Proper identification of the said elements is requested.

Catalysts are considered specific and unpredictable in the art. Therefore, similar catalyst may pretty well work in a different manner even in the same process. Applicant is suggested to identify the required catalyst. See ***Ex Parte Sixto***, 9 USPQ2d, 2081 (1988).

In claim 11, the phrase ***"hydrogenating catalyst comprises at least one species selected from the group consisting of compounds of Group VIII elements, Group IX elements and Group X elements"*** is indefinite because there are multiple alternatives embraced in the said definition. Which are the catalysts embraced by the phrase and required in the process? Are they elements or compounds comprising elements? Catalysts are considered specific and unpredictable in the art. Therefore, similar catalyst may pretty well work in a different manner even in the same process. Applicant is suggested to identify the required catalyst. See ***Ex Parte Sixto***, 9 USPQ2d, 2081 (1988). If it is intended to claim a catalyst which is an organo metallic compound, it is suggested the cancellation of the word species and the presentation of the alternative

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compounds as wherein the hydrogenating catalysts is selected from....However, the specific metals should be mentioned in order to properly define the required catalyst. In claims 31 and 33 the term ***hydrogenating catalyst which contains at least one metal selected from the group consisting of Group VIII elements, Group IX elements and Group X elements*** is indefinite because there are multiple alternatives embrace in the said definition. Which are the catalysts embraced by the phrase and required in the process? Catalysts are considered specific and unpredictable in the art. Examiner has presumed that such elements are ***elements in the VIIIB group*** for examination proposes. Proper identification is requested.

Therefore, similar catalyst may pretty well work in a different manner even in the same process. Applicant is suggested to identify the required catalyst. See ***Ex Parte Sixto***, 9 USPQ2d, 2081 (1988).

In claim 31 and 33 some variables are present in the saturated ester are different from the starting material. However, the claimed process is not supposed to alter or change the chemical composition of such groups. Therefore it is confusing to see a starting material that is different from the product or having a chemical transformation besides the one produced by the said claim. Is there any other possible chemical changes achieved through the claimed process besides the hydrogenation of the double bond? The Examiner suggests to maintained the same definition in those variable wherein no chemical changes had been taken place.

On the other hand, the definitions of variables R1 to R5 as well as variables R6 to R7 are said to denote a list of different alternatives that are indeed mutually exclusive. For



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instance, R1 cannot be all the possible alkyl groups having 1-10 carbons simultaneously, or an alkenyl group having 2 to 10 carbons etc. Such definition lacks definition and clarity. Examiner suggests the use of the proper alternative language, for Example, ***"wherein R1...R5 are selected from the group consisting of arbitrary alkyl group containing 1 to 10 carbons atoms, an arbitrary alkenyl..."***

In claims 13 and 33 the use of the phrase ***specie of an unsaturated group-containing ester*** is considered indefinite because such term is broader than the term "compound". Since Applicant is using the said term to embrace only compounds, it is suggested that the term be substituted by ***compound selected from the group consisting of ....***

In claims 11, 12, 32 and 3, the use of the word ***specie*** is considered indefinite because such term is broader than the term "element". Since Applicant is using the said term to embrace only elements, it is suggested that the term be substituted by ***element***.

#### **Claims Objected**

Claims 6, 9 are objected because such claims depend on rejected independent claim 30.

Claims 24, 26 and 29 are objected because such claims depend on rejected independent claim 31.

Claims 25, 27 and 28 are objected because such claims depend on rejected independent claim 33.

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**CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector M Reyes whose telephone number is (703) 605-1153. The examiner can normally be reached on M-F 9 to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Allan Rotman** can be reached on (703) 308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 or (for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Hector M. Reyes Ph D JD

March 12, 2003

*Alan L Rotman*

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